CSP Grazing Lands Eligibility Tool

January 2008

Background

The CSP Grazing Lands Eligibility tool was created by a team of agency experts. This team together assigned index values to each conservation measure for each of the CSP soil and water quality concern categories. The tool was further reviewed by state NRCS employees from around the country.

The tool is a spreadsheet based tool. If you have any questions or comments please contact George Peacock with the Grazing Lands Team in the Central National Technology Support Center at (817) 509-3211.

The CSP Grazing Lands Eligibility Tool answers the basic question "Does the producer address the minimum soil and water quality resource concerns outlined in the CSP legislation?"

It is not a planning tool. NRCS has more detailed planning tools, such as the pasture condition scoring and rangeland health assessment. The CSP Grazing Lands Tool was designed to determine if applicants are meeting the minimum requirements of CSP.

Scale to apply the Tool

The CSP Grazing Lands Eligibility Tool will be applied and run for the pastureland and rangeland acres that are offered by the applicant for the program. The intent is to NOT apply the tool on a field by field basis. Each statement should be interpreted as asking the question "Is ______ (management activity) applied on your offered acres?" A check in the box indicates an affirmative answer. The eligibility question must be true on all acres to be able to check the box affirmatively.

Documentation

The producer should have appropriate records and documentation available at the interview for the following:

- 1) Grazing Management Plan
- 2) Nutrient Management Plan
- 3) Pest Management Plan

The following is a narrative of the questions and additional guidance to be used to fill out the CSP Grazing Lands Eligibility Tool.

Management Activities

- 1. Adequate grazing and roughage supply is available to meet animal demands and is managed to maintain or enhance plant health and composition, protect soil surface from accelerated erosion, and increase soil organic matter. Documented forage/livestock balance done on a monthly basis that includes wildlife demand. Livestock numbers, grazing area, or grazing time per pasture/paddock are adjusted to ensure adequate plant regrowth opportunity to maintain or enhance plant vigor and protect soil surface from accelerated erosion. Adjustments to livestock numbers are made to account for forage deficits/surpluses due to climatic conditions, wildfire, insects, etc.
- 2. A minimum of 2 years of written records or documentation to support the current grazing management system are available documenting the kind, class, and number of animals and identifying the periods of grazing, rest, and other treatments for each grazing unit. To maintain or enhance plant vigor and protect soil surface from accelerated erosion and increase soil organic matter. Grazing management records must document grazing periods and deferment showing differences in season of use as identified in grazing management plan. Applicants will need to supply written records and documentation upon request from NRCS.
- 3. Livestock watering facilities; fences; salting, mineral, and supplemental feeding locations; and/or herding techniques are installed or implemented for proper livestock grazing distribution. A system of activities applied and maintained to enhance plant health, composition and vigor, reduce accelerated erosion, and minimize sedimentation and transport of sediment to surface waters.
- 4. Access roads, stock trails and other critical areas are managed to limit surface water runoff and control accelerated soil erosion. If accelerated soil erosion concerns/problems exist because of access roads, stock trails, or other critical areas, these areas must be managed to limit surface water runoff and control accelerated soil erosion. Gully erosion is stabilized.

Water Courses

5. Manage grazing of riparian areas adjacent to water courses to maintain adequate plant cover to reduce amounts of sediment, pesticides, and nutrients in surface runoff; help stabilize streambanks; and increase soil organic matter. Manage vegetative health and cover by reducing erosion, and minimize transport of sediment, pesticides, and nutrients to surface waters. Activities, such as off-stream water sources, stream crossings,

scheduled/managed grazing, grazing deferment during critical regrowth periods, fencing/exclusion, or periodic rest from grazing through rotational grazing or herding, are acceptable methods when properly chosen and applied to meet the specific situation.

6. Livestock feeding areas and other areas where livestock concentrate, such as off stream watering areas and salting and mineral locations are not located adjacent to water courses and if located adjacent to water courses have buffers, filter strips, sediment basins, or other measures established to prevent direct, unfiltered runoff into surface waters.

Pesticides (No Pesticides Concern triggers a pass for Pesticides)

- 7. CHOOSE ONE (1) Integrated Pest Management CHOICE BELOW IF NONE APPLY CHECK HERE.
 - (Choice 1) A full Integrated Pest Management system is not yet implemented, but one or more IPM management techniques that are appropriate for the site are utilized on a regular basis.

Integrated Pest Management - IPM includes a wide array of grazing management and site specific prevention, avoidance, monitoring, and suppression management techniques.

Prevention - Preventing pest populations (e.g., using pest-free seeds and sprigs, feeding hay without any noxious weed seeds, and scheduling irrigation to avoid situations conducive to disease development, etc.).

Avoidance - Avoiding pest impacts (e.g., using pest-resistant varieties, select non-invasive forage species, etc.).

Monitoring - Identifying the extent of pest populations and/or the probability of future populations (e.g., pest scouting, soil testing, weather forecasting, etc.).

Suppression - Suppressing a pest population or its impacts using cultural, biological, or chemical pest controls. Example: Cultural - Monitoring forage stand density and canopy cover and enhancing it as needed to suppress weed entry.

Note: Guidance on appropriate IPM management techniques is available from Cooperative Extension.

• (Choice 2) A basic Integrated Pest Management system with scouting and economic thresholds is used to manage pests and reduce pest management environmental risk.

A basic IPM system utilizes pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.

An economic threshold is the number of pests (weeds, insects, diseases, etc.) per some unit (square foot, acre, plant, etc.) that, if left uncontrolled, will soon increase to levels high enough to cause economic injury that is equal to the cost of suppression.

Pest management environmental risk is reduced by applying mitigation techniques. Mitigation techniques include both IPM management techniques, such as timing pesticide application to avoid heavy rainfall. Appropriate mitigation techniques may be selected based on environmental risk evaluation with tools like the NRCS Windows Pesticide Screening Tool (WIN-PST).

Note: Guidance on basic IPM systems is available from Cooperative Extension.

• (Choice 3) A high level IPM system with pesticides applied only as a last resort is used to manage pests and reduce pest management environmental risk.

A high level IPM system goes beyond a basic IPM system by relying primarily on prevention and avoidance management techniques (see definitions in Choice 1 note). When pest suppression is necessary, chemical controls are generally used only when cultural and biological controls have proven inadequate.

Pest management environmental risk is reduced by substituting cultural and biological management techniques for pesticides whenever possible, and applying other appropriate mitigation techniques. Mitigation techniques include both IPM management techniques and Conservation Practices.

Appropriate mitigation techniques may be selected based on environmental risk evaluation with tools like the NRCS Windows Pesticide Screening Tool - WIN-PST (for evaluating the use of last resort pesticides).

Note: Guidance on high level IPM systems is available from Cooperative Extension.

- 8. Selective Treatment by spot application, individual plant treatment, or directed spraying is utilized to reduce amount of pesticide applied. This can be in addition to other IPM choices above.
- 9. When applying pesticides, maintain a minimum setback distance of 33 feet between the application area and intermittent streams/ditches, perennial streams, ponds/lakes, surface water inlets and open sink holes. Or, utilize pesticides labeled for aquatic use that give desired control.

Nutrients (No Nutrients Concern triggers a pass for Nitrogen and Phosphorus)

10. Where nutrients are applied (manure/fertilizer), the rate is based on a nutrient management plan.

A nutrient management plan provides recommendations or procedures to determine the amount, form, placement and timing of plant nutrients to obtain optimum yields while minimizing the risk of surface and ground water pollution. The procedure used to determine nutrient recommendations should be based on one or more of the following:

- Realistic yield goal,
- Soil test results,
- Leguminous crop credits,
- Manure application history, and/or
- Leaf tissue analysis (if appropriate).

The nutrient management plan should address all sources of nutrients.

- 11. Are current soil tests (5 years old or less) used to make nutrient applications based on soil and plant needs? Soil samples analyzed by a recognized land grant university or private laboratory using methods approved by the land grant university for the purposes of determining amounts of nutrients needed for plant production. Producer needs to demonstrate the use of soil tests to plan nutrient application rates.
- 12. When applying manure, maintain a minimum setback distance of 33 feet between the application area and intermittent streams/ditches, perennial streams, ponds/lakes, surface water inlets and open sink holes. Application rates for liquid manure do not exceed the Available Water Capacity of the soil or produce surface runoff that leaves the field of application.
- 13. No nitrogen (manure/fertilizer)is ever applied. (This triggers a pass for nitrogen)

14. CHOOSE ONE (1) NITROGEN CHOICE BELOW

- (Choice 1) Most nitrogen (manure or fertilizer) is applied at the beginning of the growing season as a top-dress.
- (Choice 2) Most nitrogen (manure or fertilizer) is split applied: usually an initial application at start of growing season and then applied as needed after one or more grazing events during the year except last one of the growing season.
- 15. No Phosphorus is applied via fertilizer, manure, biosolids, or other amendments. (This triggers a pass for phosphorus).
- 16. No Phosphorus is applied where soil test indicate a "very high or excessive" rating. For pasture renovation only band apply starter application of P. When soil tests results that are analyzed by a recognized land grant university or private laboratory for the purposes of determining amounts of nutrients needed for plant production indicate that phosphorus levels are in the "very high" or "excessive" or "above optimum" rating category (regardless of P extraction method), no phosphorus is applied with the exception of up to 25 lbs/acre of P2O5 as starter fertilizer at time of planting.
- 17. Where applicable, nitrogen and phosphorus additions from manure, irrigation water, supplemental feed, and soil organic matter are calculated from analyses or book values and used to plan nutrient application rates.

Account for all nutrients brought onto the farm through a mass balance accounting. Where applicable, account for both nitrogen and phosphorus credits from the following sources:

- current and prior year's manure applications,
- irrigation water applied during the growing season,
- supplemental feed,
- and soil OM.

Salinity (No Salinity Concern triggers a pass for Salinity)

- 18. Saline recharge and discharge areas have been identified. Acceptable methods of identifying saline seep recharge areas include soil maps and geologic information, soil moisture probes and test holes, and visual inspections. Visual assessments and electrical conductivity measurements are acceptable methods of identifying discharge areas. Visual indicators of discharge areas include vigorous weed growth, salt crystals on the soil surface, and prolonged soil wetness.
- 19. For saline seeps discharge areas, grazing is managed to maintain and/or improve existing salt tolerant vegetation.

20. For saline seeps, grazing is managed in recharge area on permanent pasture and rangeland to provide optimum vegetation type and cover to minimize soil water percolation below root zone thereby reducing saline flows at seep discharge areas.